IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of the claims in this application.

The text of all pending claims (including any withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

Please CANCEL claims 60 and 61 without prejudice or disclaimer in accordance with the following:

1.–46. (Canceled)

47. (Previously presented) A data storage medium comprising:

audio/video (AV) data; and

mark-up documents to reproduce the AV data in an interactive mode by displaying the AV data on an AV screen embedded in a mark-up screen displaying interactive contents associated with the AV data when the mark-up documents are interpreted by a presentation engine of an apparatus to reproduce data in which the data storage medium is loaded;

wherein the mark-up documents comprise:

a plurality of mark-up documents corresponding to different parental levels; and

a start-up mark-up document specifying which one of the plurality of mark-up documents corresponding to different parental levels is to be interpreted by the presentation engine of the apparatus depending on a parental level set in the apparatus.

48. (Previously presented) The data storage medium of claim 47, wherein the start-up mark-up document comprises:

meta-information indicating a parental level of the mark-up documents; and

link information identifying locations of the plurality of mark-up documents corresponding to different parental levels.

49. (Previously presented) The data storage medium of claim 48, wherein the plurality of mark-up documents corresponding to different parental levels comprise:

a first mark-up document to be interpreted by the presentation engine of the apparatus only when the parental level indicated by the meta-information is not higher than the parental level set in the apparatus; and

a second mark-up document to be interpreted by the presentation engine of the apparatus only when the parental level indicated by the meta-information is higher than the parental level set in the apparatus; and

wherein the link information comprises

first link information identifying the location of the first mark-up document; and

second link information identifying the location of the second mark-up document.

50. (Previously presented) The data storage medium of claim 47, wherein each mark-up document of the plurality of mark-up documents corresponding to different parental levels corresponds to a different one of the different parental levels, and is to be interpreted by the presentation engine of the apparatus only when the parental level of the mark-up document is the same as a parental level set in the apparatus; and

wherein the start-up mark-up document comprises link information identifying locations of the plurality of mark-up documents corresponding to different parental levels.

51. (Previously presented) The data storage medium of claim 47, wherein the AV data comprises DVD-video data;

wherein the mark-up documents comprise:

documents written in a mark-up language; and/or

documents to which source code written in a script language and/or Java is linked; and/or

documents into which source code written in the script language and/or Java is inserted; and/or

mark-up resources; and

wherein the different parental levels comprise different parental levels according to a DVD-video standard.

52. (Previously presented) A data storage medium comprising:

a video directory;

audio/video (AV) data stored in the video directory;

an interactive directory; and

mark-up documents, stored in the interactive directory, to reproduce the AV data in an interactive mode by displaying the AV data on an AV screen embedded in a mark-up screen displaying interactive contents associated with the AV data when the mark-up documents are interpreted by a presentation engine of an apparatus to reproduce data in which the data storage medium is loaded;

wherein the interactive directory comprises a plurality of sub-directories corresponding to a plurality of different parental levels; and

wherein the mark-up documents comprise a plurality of mark-up documents corresponding to the plurality of different parental levels stored in corresponding ones of the plurality of sub-directories corresponding to the plurality of different parental levels.

53. (Previously presented) A data storage medium comprising:

a video directory;

audio/video (AV) data stored in the video directory;

an interactive directory;

mark-up documents, stored in the interactive directory, to reproduce the AV data in an interactive mode by displaying the AV data on an AV screen embedded in a mark-up screen displaying interactive contents associated with the AV data when the mark-up documents are interpreted by a presentation engine of an apparatus to reproduce data in which the data storage medium is loaded;

wherein the interactive directory comprises a plurality of sub-directories corresponding to a plurality of different parental levels; and

wherein the mark-up documents comprise:

a plurality of mark-up documents corresponding to the plurality of different parental levels stored in corresponding ones of the plurality of sub-directories corresponding to the plurality of different parental levels; and

a start-up mark-up document comprising link information identifying locations of the plurality of mark-up documents corresponding to the plurality of different parental levels.

54. (Previously presented) The data storage medium of claim 53, wherein the link information is written using a different link tag for each of the plurality of mark-up documents corresponding to the plurality of parental levels.

55. (Previously presented) A data storage medium comprising:

audio/video (AV) data; and

mark-up documents to reproduce the AV data in an interactive mode by displaying the AV data on an AV screen embedded in a mark-up screen displaying interactive contents associated with the AV data when the mark-up documents are interpreted by a presentation engine of an apparatus in which the data storage medium is loaded;

wherein the mark-up documents comprise a mark-up document comprising, or linked to, display rule information for a plurality of different parental levels specifying whether to display the interactive contents associated with the AV data depending on a parental level set in the apparatus.

56. (Previously presented) The data storage medium of claim 55, wherein the display rule information for the plurality of different parental levels specifies whether to display elements of the mark-up documents depending on the parental level set in the apparatus.

57. (Previously presented) The data storage medium of claim 55, wherein the display rule information is written according to cascading style sheets (CSS) rules.

58. (Previously presented) The data storage medium of claim 55, wherein elements of the mark-up documents each have a class attribute; and

wherein the display rule information for the plurality of different parental levels specifies whether to display each of the elements depending on a value of the class attribute of the element and the parental level set in the apparatus.

59. (Previously presented) The data storage medium of claim 58, wherein the display rule information is written in the form of a cascading style sheets (CSS) file to which the mark-up

document comprising, or linked to, display rule information for a plurality of different parental levels is linked.

60.–61. (Canceled)

62. (Previously presented) An apparatus to reproduce data recorded on a data storage medium, the data comprising audio/video (AV) data, and mark-up documents to reproduce the AV data in an interactive mode, the mark-up documents comprising a mark-up document comprising display rule information for a plurality of different parental levels, the apparatus comprising:

an optical pickup to radiate laser beams on the data storage medium to read the mark-up documents and the AV data from the data storage medium;

an AV decoder to decode the AV data read by the optical pickup to reproduce the AV data;

a presentation engine to interpret the mark-up documents read by the optical pickup to generate a mark-up screen having an AV screen embedded therein; and

a blender to blend the mark-up screen generated by the presentation engine and the AV data reproduced by the decoder so that the reproduced AV data is displayed on the AV screen embedded in the mark-up screen;

wherein the presentation engine:

identifies a value of a predetermined attribute of an element of one of the mark-up documents; and

determines whether to display the element on the mark-up screen depending on the value of the predetermined attribute, the display rule information, and a parental level set in the apparatus.

63. (Previously presented) The apparatus of claim 62, wherein the display rule information is written according to cascading style sheets (CSS) rules.

64. (Previously presented) The apparatus of claim 63, wherein the display rule information is written in a form of a CSS file.

65. (Previously presented) The apparatus of claim 62, wherein the predetermined attribute is a class attribute.

66. (Previously presented) The apparatus of claim 62, wherein the display rule information for each of the plurality of different parental levels comprises individual display rule information for each higher one of the plurality of different parental levels.

67. (Previously presented) An apparatus to reproduce data from a data storage medium,

the data comprising

audio/video (AV) data, and

mark-up documents to reproduce the AV data in an interactive mode by displaying the AV data on an AV screen embedded in a mark-up screen displaying interactive contents associated with the AV data,

the mark-up documents comprising a mark-up document comprising instructions corresponding to different parental levels to control display of the interactive contents associated with the AV data depending on a parental level set in the apparatus,

the apparatus comprising:

an optical pickup to radiate laser beams on the data storage medium to read the mark-up documents and the AV data from the data storage medium; and

a presentation engine to interpret the mark-up document comprising the instructions corresponding to the different parental levels in the mark-up documents read by the optical pickup to determine whether to display the interactive contents associated with the AV data depending on the parental level set in the apparatus.

68. (Previously presented) The apparatus of claim 67, wherein the presentation engine interprets the mark-up documents read by the optical pickup to generate the mark-up screen having the AV screen embedded therein; and

wherein the apparatus further comprises:

an AV decoder to decode the AV data read by the optical pickup to reproduce the AV data; and

a blender to blend the mark-up screen generated by the presentation engine and the AV data reproduced by the decoder so that the reproduced AV data is displayed on the AV screen embedded in the mark-up screen.

69. (Previously presented) The apparatus of claim 67, wherein the presentation engine comprises plug-ins.

70. (Previously presented) The apparatus of claim 67, wherein the apparatus has a capability of retrieving AV data and mark-up documents through a network.

71. (Previously presented) The apparatus of claim 67, wherein the different parental levels comprise G, PG, PG13, R, and NC-17 parental levels defined by a DVD-video standard for compatibility.

72. (Previously presented) The apparatus of claim 67, wherein the AV data comprises DVD-video data; and

wherein the different parental levels comprise different parental levels according to a DVD-video standard for compatibility.

73. (Previously presented) The apparatus of claim 67, wherein the presentation engine uses an application program interface (API) to identify the parental level set in the apparatus.

74. (Previously presented) The apparatus of claim 67, wherein the mark-up documents comprise a plurality of mark-up documents corresponding to the different parental levels; and

wherein mark-up document comprising the instructions corresponding to the different parental levels is a start-up mark-up document comprising:

meta-information indicating a parental level of the mark-up documents; and

link information identifying locations of the mark-up documents corresponding to the different parental level levels.

75. (Previously presented) The apparatus of claim 74, wherein each mark-up document of the plurality of mark-up documents corresponding to different parental levels corresponds to a

different one of the different parental levels, and is to be interpreted by the presentation engine only when the parental level of the mark-up document is the same as the parental level set in the apparatus.

76. (Previously presented) The apparatus of claim 74, wherein the presentation engine uses an application program interface (API) to identify the parental level set in the apparatus.

77. (Previously presented) The apparatus of claim 67, wherein the data storage medium comprises:

a video directory in which the AV data is stored; and

an interactive directory in which the mark-up document are stored.

78. (Previously presented) The apparatus of claim 67, wherein the mark-up document comprising the instructions corresponding to the different parental levels comprises a mark-up document comprising, or linked to, display rule information for the different parental levels written according to cascading style sheets (CSS) rules.

79. (Previously presented) The apparatus of claim 78, wherein the mark-up document comprising, or linked to, display rule information is linked to a CSS file comprising the instructions corresponding to the different parental levels written according to the CSS rules.

80. (Previously presented) The apparatus of claim 67, wherein the mark-up documents comprise:

documents written in a mark-up language; and/or

documents to which source code written in a script language and/or Java is linked; and/or

documents into which source code written in the script language and/or Java is inserted; and/or

mark-up resources.